

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

Claims 1-75 are cancelled.

76. (previously presented): An elongated guide wire for use in a surgical or other procedure for

accessing a remote site in the body of a human or animal subject, the guide wire defining a longitudinally extending central axis, and extending axially between a distal end for accessing the remote site, and a spaced apart proximal end, a distal portion of the guide wire adjacent the distal end thereof being of substantially rectangular transverse cross-section defining a pair of spaced apart major surfaces, and a pair of spaced apart minor surfaces extending between the major surfaces, the distal portion further defining a central major plane lying intermediate the major surfaces and bisecting the minor surfaces, and a central minor plane lying intermediate the minor surfaces and bisecting the major surfaces, wherein the distal portion is bent into a curved configuration in the central major plane for forming an alignment portion lying in the central major plane and extending from the bend at an angle greater than zero relative to the central axis for facilitating guiding of the guide wire into a branched vessel of the subject.

77. (previously presented): A guide wire as claimed in Claim 76 in which the alignment portion extends relative to the central axis at an angle up to 90°, and preferably, the alignment

portion extends relative to the central axis at an angle up to  $60^\circ$ , and advantageously, the alignment portion extends relative to the central axis at an angle up to  $45^\circ$ , and preferably, the alignment portion extends relative to the central axis at an angle up to  $30^\circ$ , and advantageously, the alignment portion extends relative to the central axis at an angle in the range of  $30^\circ$  to  $90^\circ$ .

78. (previously presented): A guide wire as claimed in Claim 76 in which the distal portion of the guide wire is of a material for retaining the distal portion in the curved configuration formed by the bend, and preferably, the distal portion of the guide wire is of dimensions for retaining the distal portion in the curved configuration formed by the bend, and advantageously, the distal portion of the guide wire is bendable in the central minor plane thereof for facilitating bending of the distal portion with at least a part of the alignment portion bent out of the central major plane for facilitating guiding of the guide wire into a branched vessel of the subject, and preferably, the distal portion of the guide wire is bendable in the central minor plane thereof for facilitating bending of the distal portion with the alignment portion bent out of the central major plane for facilitating guiding of the guide wire into a branched vessel of the subject, and advantageously, the distal portion of the guide wire is of material for facilitating manual bending of the distal portion in the central minor plane thereof, and preferably, the distal portion of the guide wire is dimensioned for facilitating manual bending of the distal portion in the central minor plane thereof, and advantageously, the distal portion of the guide wire is of stainless steel material.

79. (previously presented): A guide wire as claimed in Claim 76 in which the major surfaces of the distal portion of the guide wire converge towards the distal end.

80. (previously presented): A guide wire as claimed in Claim 76 in which the minor surfaces of the distal portion of the guide wire diverge towards the distal end, and alternatively, the minor surfaces of the distal portion of the guide wire are parallel to each other.

81. (previously presented): A guide wire as claimed in Claim 76 in which a reinforcing means is provided on the distal portion of the guide wire for minimising bending of the distal portion in the central minor plane thereof, and preferably, the reinforcing means extending along at least a portion of the distal portion of the guide wire from a proximal end of the distal portion, and preferably, the reinforcing means extends along at least a part of the alignment portion, and advantageously, the reinforcing means terminates at a location spaced apart from the distal end of the alignment portion, and preferably, the reinforcing means is located to coincide substantially with the central minor plane defined by the distal portion, and advantageously, the reinforcing means comprises an elongated reinforcing member extending along one of the major surfaces of the distal portion.

82. (previously presented): A guide wire as claimed in Claim 76 in which the guide wire comprises an elongated core wire extending from the proximal end to the distal portion, and preferably, the core wire terminates in the distal portion, and preferably, the distal portion of the

guide wire is integrally formed with the core wire, and advantageously, the distal portion of the guide wire is formed from the core wire, and alternatively, the distal portion of the guide wire is formed separately from the core wire, and is secured thereto, and preferably, the distal portion of the guide wire terminates in a bulbous portion at the distal end of the guide wire for facilitating guiding of the guide wire through vessels of the subject without damaging the vessels, and advantageously, the bulbous portion is radiused, and preferably, the bulbous portion defines the distal end of the guide wire and defines a hemispherical distal end.

83. (previously presented): A guide wire as claimed in Claim 82 in which the guide wire comprises a sleeve extending from the bulbous portion in a proximal direction and the core wire extends through the sleeve, and preferably, the sleeve extends along the core wire in the proximal direction beyond the distal portion of the guide wire, and advantageously, the sleeve terminates at a location intermediate the distal portion and the proximal end of the guide wire, and preferably, one end of the sleeve is secured to the bulbous portion of the guide wire, and the other end of the sleeve is secured to the core wire, and advantageously, the sleeve is secured to the guide wire by soldering, and preferably, the sleeve is of transverse cross-section, the outer periphery of which substantially coincides with the outer periphery defined by the transverse cross-section of the bulbous portion.

84. (previously presented): A guide wire as claimed in Claim 82 in which the distal end of the sleeve is of a radiopaque material, and preferably, the sleeve is of a radiopaque material, and preferably, the sleeve is selected from one or more of the following metals:

platinum,

platinum alloy,

gold,

tantalum.

85. (previously presented): A guide wire as claimed in Claim 83 in which the sleeve comprises a helically wound coil, and preferably, the sleeve comprises a tightly wound helical coil, and advantageously, the sleeve is of a plastics material, and preferably, the sleeve is provided in at least two longitudinally extending sections, one of which is of plastics material, and the other of a tightly wound helical coil, and preferably, the guide wire is adapted for use in accessing a remote site in the body of a human or animal subject.

86. (previously presented): In combination a catheter for use in a surgical or other procedure for accessing a remote site in the body of a human or animal subject, and an elongated guide wire, characterised in that the elongated guide wire is a guide wire as claimed in Claim 1.

87. (previously presented): In combination a catheter for use in a surgical or other procedure for accessing a remote site in the body of a human or animal subject, and an elongated

guide wire, the guide wire defining a longitudinally extending central axis, and extending axially between a distal end for accessing the remote site, and a spaced apart proximal end, a distal portion of the guide wire adjacent the distal end thereof being of substantially rectangular transverse cross-section defining a pair of spaced apart major surfaces, and a pair of spaced apart minor surfaces extending between the major surfaces, the distal portion further defining a central major plane lying intermediate the major surfaces and bisecting the minor surfaces, and a central minor plane lying intermediate the minor surfaces and bisecting the major surfaces, characterised in that the distal portion is bent into a curved configuration in the central major plane for forming an alignment portion lying in the central major plane and extending from the bend at an angle greater than zero relative to the central axis for facilitating guiding of the guide wire into a branched vessel of the subject.

88. (previously presented): A method for forming an elongated guide wire for use in a surgical or other procedure for accessing a remote site in the body of a human or animal subject, the method comprising the steps of:

forming the distal portion of the guide wire of substantially rectangular transverse cross-section defining a pair of spaced apart major surfaces, and a pair of spaced apart minor surfaces extending between the major surfaces, the distal portion further defining a central major plane lying intermediate the major surfaces and bisecting the minor surfaces, and a central minor plane lying intermediate the minor surfaces and bisecting the major surfaces, and

bending the distal portion into a curved configuration in the central major plane for forming an alignment portion lying in the central major plane and extending from the bend at an angle greater than zero relative to the central axis for facilitating guiding of the guide wire into a branched vessel of the subject.

89. (previously presented): A method as claimed in Claim 88 in which the alignment portion extends relative to the central axis at an angle up to 90°, and preferably, the alignment portion extends relative to the central axis at an angle up to 60°, and advantageously, the alignment portion extends relative to the central axis at an angle up to 45°, and preferably, the alignment portion extends relative to the central axis at an angle up to 30°, and advantageously, the alignment portion extends relative to the central axis at an angle in the range of 30° to 90°.

90. (previously presented): A method as claimed in Claim 88 in which the distal portion of the guide wire is formed from a material for retaining the distal portion in the curved configuration formed by the bend, and preferably, the distal portion of the guide wire is formed of dimensions for retaining the distal portion in the curved configuration formed by the bend.

91. (previously presented): A method as claimed in Claim 88 in which the distal portion of the guide wire is bendable in the central minor plane thereof for facilitating bending of the distal portion with at least a part of the alignment portion bent out of the central major plane for facilitating guiding of the guide wire into a branched vessel of the subject, and preferably, the

distal portion of the guide wire is formed from a material for facilitating manual bending of the distal portion in the central minor plane thereof, and advantageously, the distal portion of the guide wire is formed of dimensions which facilitate manual bending of the distal portion in the central minor plane thereof, and preferably, the distal portion of the guide wire is formed from stainless steel material.

92. (previously presented): A method as claimed in Claim 88 in which the distal portion of the guide wire is formed with the major surfaces thereof converging towards the distal end.

93. (previously presented): A method as claimed in Claim 88 in which the distal portion of the guide wire is formed with the minor surfaces thereof diverging towards the distal end.

94. (previously presented): A method as claimed in Claim 88 in which a reinforcing means is provided on the distal portion of the guide wire for minimising bending of the distal portion in the central minor plane thereof, and preferably, the reinforcing means is provided for extending along at least a portion of the distal portion of the guide wire from a proximal end of the distal portion, and advantageously, the reinforcing means is provided for extending along at least a part of the alignment portion, and preferably, the reinforcing means is provided to terminate at a location spaced apart from the distal end of the alignment portion, and advantageously, the reinforcing means is located to coincide substantially with the central minor



plane defined by the distal portion, and preferably, the reinforcing means is provided by an elongated reinforcing member extending along one of the major surfaces of the distal portion.

95. (previously presented): A method as claimed in Claim 88 in which the guide wire is formed with an elongated core wire extending from the proximal end to the distal portion, and preferably, the distal portion of the guide wire is integrally formed with the core wire, and advantageously, the distal portion of the guide wire is formed from the core wire, and alternatively, the distal portion of the guide wire is formed separately from the core wire, and is secured thereto, and preferably, the distal portion of the guide wire is terminated in a bulbous portion at the distal end of the guide wire for facilitating guiding of the guide wire through vessels of the subject without damaging vessels, and preferably, the bulbous portion is radiused, and preferably, the bulbous portion of the guide wire defines the distal end of the guide wire and defines a spherical distal end, and advantageously, a sleeve is provided extending from the bulbous portion in a proximal direction along the guide wire, and the core wire extends through the sleeve, and preferably, the sleeve terminates at a location intermediate the distal portion and the proximal end of the guide wire.